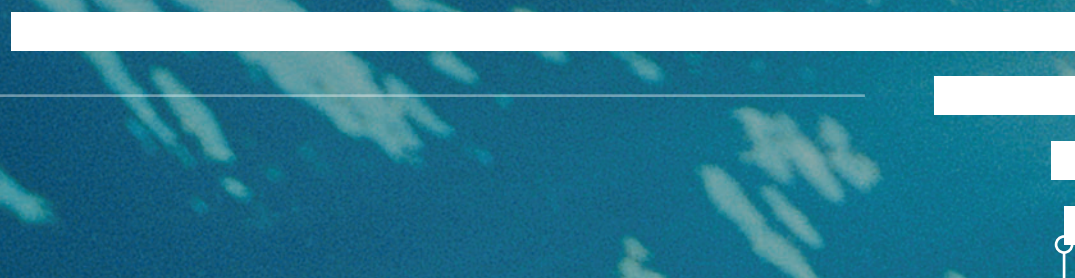


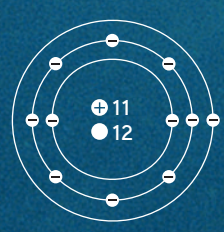
EARTH'S OCEANS

100% | 75% | 50% | 25% | 0% ELEMENTS > 1% PERCENTAGE OF ABUNDANCE LOCATION ON THE PERIODIC TABLE



SODIUM PROFILE

11
Na
sodium
22.98976...



Stars with > 3 solar masses

fuse carbon atoms to form the soft, highly reactive metal sodium.

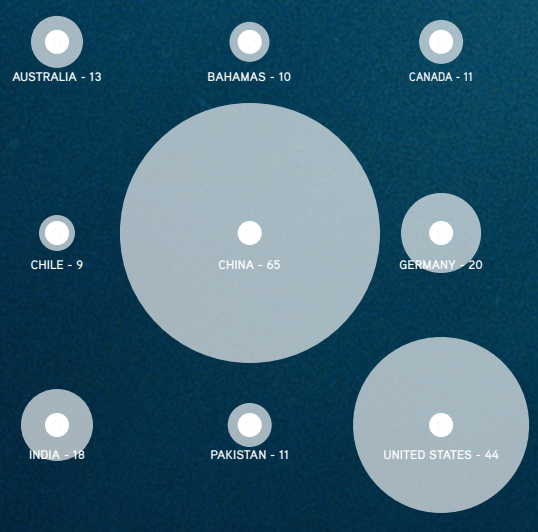
Sodium is probably best known as one of the main ingredients of salt. Salt, or NaCl, is a compound containing sodium and ionized chlorine, the two most predominant elements in the oceans after hydrogen and oxygen (which make up water, or H₂O).

Salt is a critical electrolyte in the bodies of many life forms and its ability to maintain acid-base balances, transmit nerve impulses, and regulate fluids at the cellular level may have given this sodium compound an important role in the formation of life in Earth's oceans. Salt's role in human history is also significant. The first salt roads were built thousands of years ago in the Bronze Age or earlier, and the use of salt to preserve food supplies contributed to the capacity for growth of many early civilizations.

Salt remains an important commodity and is produced worldwide.

GLOBAL LEADERS IN SALT PRODUCTION

ANNUAL PRODUCTION IN MILLIONS OF METRIC TONS



Element	Percentage of Abundance
oxygen	86%
hydrogen	11%
chlorine	2%
sodium	1%

ELEMENTS < 1%

magnesium	0.13
sulfur	0.093
potassium	0.042
bromine	0.0067
carbon	0.0028
strontium	8.1×10 ⁻⁴
boron	4.4×10 ⁻⁴
calcium	4.2×10 ⁻⁴
fluorine	1.3×10 ⁻⁴
silicon	1×10 ⁻⁴
nitrogen	5×10 ⁻⁵
argon	4.5×10 ⁻⁵
lithium	1.8×10 ⁻⁵
rubidium	1.2×10 ⁻⁵
phosphorus	7×10 ⁻⁶
iodine	6×10 ⁻⁶
barium	3×10 ⁻⁶
molybdenum	1×10 ⁻⁶
zinc	5×10 ⁻⁷
aluminum	5×10 ⁻⁷
uranium	3.3×10 ⁻⁷
iron	3×10 ⁻⁷
copper	3×10 ⁻⁷
arsenic	2.3×10 ⁻⁷
nickel	2×10 ⁻⁷
manganese	2×10 ⁻⁷
vanadium	1.5×10 ⁻⁷
titanium	1×10 ⁻⁷
chromium	6×10 ⁻⁸
cesium	5×10 ⁻⁸
selenium	4.5×10 ⁻⁸
krypton	2.1×10 ⁻⁸
antimony	2×10 ⁻⁸
tungsten	1.2×10 ⁻⁸
neon	1.2×10 ⁻⁸
silver	1×10 ⁻⁸
cobalt	8×10 ⁻⁹
germanium	6×10 ⁻⁹
mercury	5×10 ⁻⁹
gold	5×10 ⁻⁹
cadmium	5×10 ⁻⁹
lead	3×10 ⁻⁹
gallium	3×10 ⁻⁹
zirconium	2.6×10 ⁻⁹
bismuth	2×10 ⁻⁹
yttrium	1.3×10 ⁻⁹
tin	1×10 ⁻⁹
hafnium	8×10 ⁻¹⁰
helium	7.2×10 ⁻¹⁰
xenon	5×10 ⁻¹⁰
lanthanum	3.4×10 ⁻¹⁰
neodymium	2.8×10 ⁻¹⁰
tantalum	2×10 ⁻¹⁰
scandium	1.5×10 ⁻¹⁰
cerium	1.2×10 ⁻¹⁰
thallium	1×10 ⁻¹⁰
rhenium	1×10 ⁻¹⁰
niobium	1×10 ⁻¹⁰
dysprosium	9.1×10 ⁻¹¹
erbium	9×10 ⁻¹¹
ytterbium	8×10 ⁻¹¹
ruthenium	7×10 ⁻¹¹
gadolinium	7×10 ⁻¹¹
praseodymium	6×10 ⁻¹¹
beryllium	6×10 ⁻¹¹
samarium	4.5×10 ⁻¹¹
holmium	2.2×10 ⁻¹¹
thulium	2×10 ⁻¹¹
lutetium	1.5×10 ⁻¹¹
terbium	1.4×10 ⁻¹¹
europium	1.3×10 ⁻¹¹
indium	1×10 ⁻¹¹
thorium	4×10 ⁻¹²
radium	1×10 ⁻¹⁵
polonium	2×10 ⁻¹⁸
radon	6×10 ⁻²⁰
protactinium	2×10 ⁻²³

ELEMENTS = 0% OR UNKNOWN

technetium	americium	hassium
rhodium	curium	meitnerium
palladium	berkelium	darmstadtium
tellurium	californium	roentgenium
promethium	einsteinium	copernicium
osmium	fermium	ununtrium
iridium	mendelevium	flerovium
platinum	nobelium	ununpentium
astatine	lawrencium	livermorium
francium	rutherfordium	ununseptium
actinium	dubnium	ununoctium
neptunium	seaborgium	
plutonium	bohrium	

